

# *Acomis bella* (Asteraceae: Gnaphalieae), a new species from north Queensland

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## Summary

Holland, Ailsa E. (1997). *Acomis bella* (Asteraceae, Gnaphalieae), a new species from north Queensland. *Austrobaileya* 4(4): 609–612. *Acomis bella* is described and illustrated, notes are provided on its habitat and distribution, and a key to all species of *Acomis* F. Muell. recognised is provided.

Keywords: Asteraceae, Gnaphalieae, *Acomis bella*, *Acomis macra*, *Acomis kakadu*, *Acomis lesteri*, *Acomis acoma*.

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## Introduction

*Acomis* F. Muell. is an Australian genus of 4 species, namely *A. acoma* (F. Muell) Druce, *A. macra* F. Muell., *A. kakadu* Paul G. Wilson and the new species, *A. bella* (*A. lesteri* Burkhill, is here considered to be conspecific with *A. macra*). According to Paul G. Wilson (1992), 'the name *Acomis* was published by F. Mueller in 1864 and validated along with *Acomis macra* by a genero-specific description...' and so the type of the genus is *Acomis macra*. The new species *A. bella* is most closely related to *A. macra* and *A. kakadu* (see notes and key to species). The problem of generic limits, as noted by Anderberg (1991) and Paul C. Wilson (1992), will be dealt with elsewhere.

***Acomis bella*** A.E. Holland, sp. nov. affinis *Acomidi macrae* F. Muell. a qua foliis et bracteis involucribus latioribus, stylorum apicibus elongatis, absentia flosculorum femineorum et cypselae pagina minute conice papillosa, differt. **Typus:** Queensland. COOK DISTRICT: 2.5 km from Dixie Station on the track to the Laura to Musgrave road, 15°05'S, 143°19'E, 4 June 1989, J.R. Clarkson 8138 & V.J. Neldner (holo: BRI; iso: AD, BRI [spirit], DNA, K, L, MBA, MEL, MO, NSW, QRS).

Erect or ascending annual herb. Stem initially very short with a rosette of leaves and erect

peduncles, later elongating and ascending to 17 cm long. Branches slender, densely white cobwebby hairy. Leaves sessile, initially forming a rosette, later alternate and reducing in size towards apex, linear, 1.4–10.0 cm long, 1.0–2.2 mm wide, entire, subulate at apex with both surfaces densely white cobwebby hairy, 1-veined. Inflorescence mainly in upper axils; peduncles 2–22 cm long, densely white cobwebby hairy, without scales; capitula solitary, hemispherical, 7.0–13.0 mm diam., with 3 or 4 rows of involucrial bracts and 60–80 florets. Involucrial bracts homomorphic, clawed; claw oblong, woolly hairy except on innermost bracts, sparsely covered with short glandular hairs, completely filled with a brown flat stereome, 0.8–1.2 mm long, 0.7–1.4 mm wide, with c. 3 vascular strands branched and looped at apex; lamina separated from claw by a fold, obovate, 2.5–4.0 mm long, 1.2–3.0 mm wide, obtuse, entire, scarious, glabrous, pale yellow-brown, translucent. Receptacle a hemispherical dome, 1.5 mm high, 2.2–3.0 mm diam., glabrous. Florets all bisexual, actinomorphic, equalling the involucre. Corolla 4.0–4.6 mm long, yellow; proximally cylindrical, 2.4–2.6 mm long, moderately glandular hairy; distally campanulate, 1.6–2.0 mm long, with 5 triangular lobes c. 1 mm long; vascular strands extending nearly to tips. Anthers c. 1.5 mm long; apex narrowly triangular, c. 0.5 mm long, subacute; collar c. 0.2 mm long; tails absent. Style arms elongate and tapered at apex, 1.0–1.3 mm long, prominently papillose in distal 2/3; stigmatic patches in proximal 1/3. Cypselae obovoid,

0.9–1.2 mm long, c. 1 mm wide, rounded at apex; pericarp densely covered with minute conical dark brown papillae interspersed with large clear globose 2-celled tubercles; vascular strands 2; seed free from pericarp; testa membranous; pappus absent. **Fig. 1.**

**Additional specimens examined: Queensland.** COOK DISTRICT: c. 8 km SE Bramwell, 12°11'S, 142°40'E, Aug 1991, *Clarkson* 9111 (BRI, QRS); Bramwell turnoff on the Cape York Development road, 12°13'S, 142°35'E, Aug 1987, *Clarkson* 7340 (BRI + spirit, QRS); just E of Myall Creek on the road from Weipa to Sudley, 12°39'S, 142°16'E, Aug 1983, *Clarkson* 4889 (BRI, QRS); 2.5 km from Lakefield to Musgrave road, on the track to Low Lake, 14°37'S, 143°54'E, Aug 1987, *Clarkson* 7325 (BRI, QRS); 8.6 km W of the Morehead River crossing on the track west from Breeza Plains to Fifteen Mile Creek, 14°49'S, 143°50'E, Sep 1983, *Clarkson* 5016 (BRI, QRS); 4.9 km NW of Alice River crossing on the track from Kimba to the New Dixie-Oroners road, 15°24'S, 143°15'E, Jun 1981, *Clarkson* 3756 (BRI, QRS). 31 miles [49.6 km] from Moreton Telegraph Stn, Aug 1968, *Gittins* 1871 (BRI).

**Distribution and habitat: Queensland.** COOK DISTRICT: *A. bella* occurs on Cape York Peninsula from as far north as Bramwell south to the Alice River. *A. bella* occurs on pink or white sand or fine sandy loam in open woodland dominated by *Melaleuca viridiflora* Sol. ex

Gaertn., *M. leucadendra* (L.)L., *Corymbia confertiflora* (F.Muell.) K.D.Hill & L.A.Johnson, *E. tetradonta* F.Muell. or *Corymbia clarksoniana* (D.J.Carr & S.G.M.Carr) K.D.Hill & L.A.S.Johnson. It often appears after fire.

**Notes:** *A. macra* and *A. kakadu* are similar to *A. bella* in the annual habit, the linear leaves, the hemispherical receptacle, the glandular hairy corolla tube and the absence of anther tails. Differences are given in the key.

**Phenology:** Flowers from June through to September. The plant flowers profusely from an early stage before the stem begins to elongate, and continues to do so throughout its life.

**Conservation status:** This species is locally common although presently known only from seven localities. It is not considered to be rare or threatened.

**Etymology:** The species epithet is derived from the Greek *bella* meaning 'beautiful', a reference to the beautiful yellow flowers which carpet the ground in spring.

**Key to species of the genus *Acomis***

- 1. Subshrubs; leaves ovate to lanceolate; receptacle slightly convex; corolla tube glabrous (SE QLD, NE NSW) ..... **A. acoma**  
 Annuals; leaves linear or filiform; receptacle conical or hemispherical; corolla tube glandular hairy ..... 2
- 2. Bracts white, opaque; receptacle white-villous; inflorescence corymbose (N.T.) ..... **A. kakadu**  
 Bracts pale yellow or brown, translucent; receptacle minutely hairy or glabrous; capitula solitary (QLD) ..... 3
- 3. Leaves filiform, less than 1 mm wide; female florets present; style apices truncate; cypsela surface shiny, tuberculate (SW QLD) ..... **A. macra**  
 Leaves linear, 12.2 mm wide; female florets absent; style apices tapered; cypsela surface covered with minute conical papillae interspersed with large globose tubercles (N QLD) ..... **A. bella**

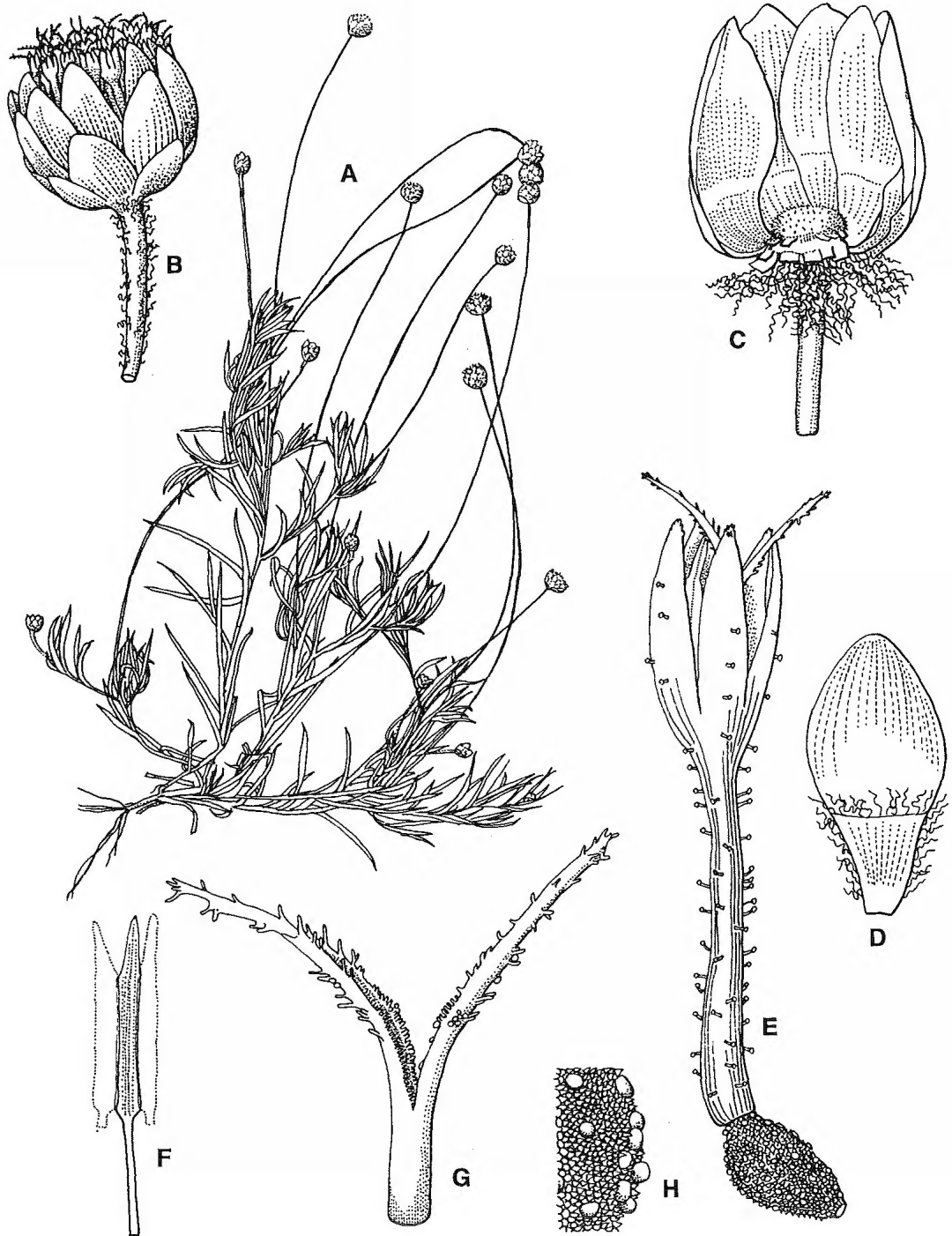


Fig. 1. *Acomis bella*. A. habit  $\times 0.4$ . B. capitula  $\times 4$ . C. receptacle  $\times 8$ . D. intermediate involucre bract  $\times 8$ . E. floret  $\times 20$ . F. anther  $\times 20$ . G. style arms  $\times 40$ . H. cypselum surface  $\times 48$ . All drawn from the type specimen. Del. W. Smith.

**Note:** Burkill (1901) distinguished his species *A. lesteri* from *A. macra* by its moderately tomentose branches. *A. macra* has nearly glabrous branches. Domin (1929) judged that *Acomis lesteri* Burkill was a variety of *A. macra*, distinguished only by the more dense indumentum (but never very dense) and the shorter leaves. I have examined the type specimen of *A. lesteri* and specimens of both taxa at BRI. The specimens are variously hairy, glabrescent or glabrous except for a few hairs in the axils and I have found no other differences. I therefore agree with Domin that *A. lesteri* is conspecific with *A. macra*.

### Acknowledgements

I am grateful to John Clarkson for bringing this new species to my attention and for providing habitat information. I also thank Will Smith for the illustrations and Peter Bostock for the Latin diagnosis.

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